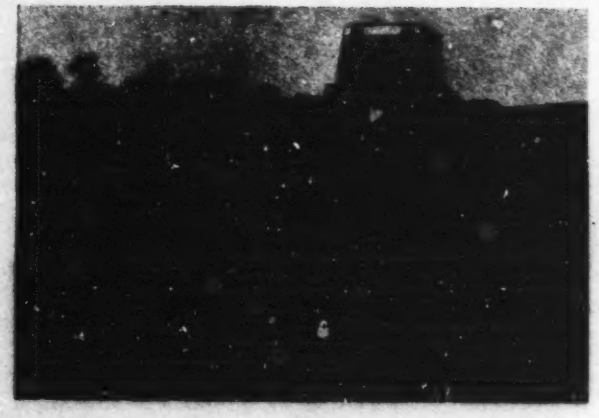
Economics Information

REPT. NO. 85-01

Ontario

A SURVEY OF CUSTOM FARMWORK RATES CHARGED IN ONTARIO, 1984



ECONOMICS INFORMATION

REPORT NO. 85-01

A SURVEY OF CUSTOM FARMWORK RATES CHARGED IN ONTARIO, 1984

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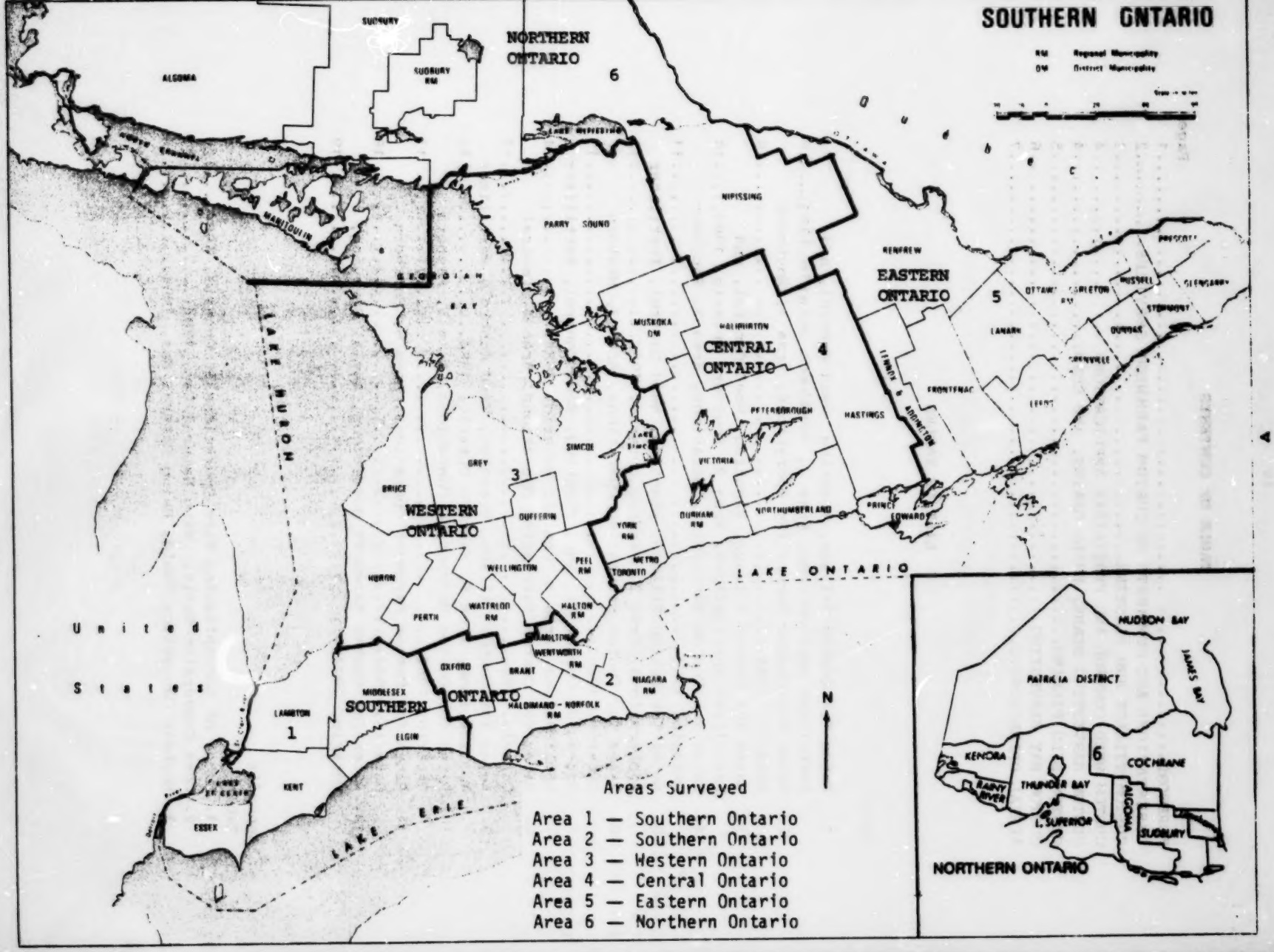
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FOREWORD

In November 1984, the Economics branch of the Ontario Ministry of Agriculture and Food (OMAF) conducted a survey of custom farmwork rates charged during 1984 for six areas of Ontario. Over 900 mail-back survey forms were sent to custom operators, with over 500 being returned. Each custom operator was asked to volunteer information on custom services provided, schedule of rates charged for 1984, and equipment and labor provided. All information was treated confidentially. This report updates the 1983 survey of custom farm rates charged in Ontario.

The results of the 1984 survey are presented in Tables 1 through 12. For each of the survey areas, the ranges of rates, the most frequently quoted rates, and the average rates are given for the most common operations performed. The information in this report may be used as a guide by custom operators and by farmers using custom services, **BUT IT SHOULD NOT BE INTERPRETED AS RECOMMENDATIONS.**

The custom work survey rates are reported by areas as follows.

Area 1 - Southern Ontario: Essex, Kent, Lambton, Middlesex, and Elgin Counties.

Area 2 - Southern Ontario: Oxford and Brant counties; and regional municipalities of Haldimand-Norfolk, Niagara, and Hamilton-Wentworth.

Area 3 - Western Ontario: Huron, Perth, Bruce, Grey, Wellington, Dufferin, and Simcoe counties; and regional municipalities of Waterloo, Peel, and Halton.

Area 4 - Central Ontario: Victoria, Northumberland, Peterborough, Hastings, and Prince Edward counties; and regional municipalities of York and Durham.

Area 5 - Eastern Ontario: Lennox and Addington, Frontenac, Leeds, Lanark, Renfrew, Grenville, Dundas, Stormont, Russell, Prescott, and Glengarry counties; and the regional municipality of Ottawa-Carleton.

Area 6 - Northern Ontario: Algoma, Cochrane North and South, Kenora, Manitoulin, Nipissing, Rainy River, and Timiskaming.

OBSERVATIONS AND COMMENTS ON CUSTOM FARMWORK SERVICES

If today's farmers are to meet the challenge of changing cost-price relationships, they need good management as well as efficient farming operations. The services offered by custom work operators play an important part in Ontario's farming activities. With the trend toward increased mechanization, many farmers have overinvested in specialized machinery in an attempt to reduce labor requirements and increase farm efficiency. By using custom work services, farmers can obtain the benefit of these specialized machines without having to buy them. Many cannot economically afford to own and operate such equipment for the amount of work on their farms. Custom work services also allow farmers to use their labor for other purposes.

Custom rates should cover all costs, such as interest on investment, depreciation, repairs, maintenance, housing, insurance, grease, oil, and fuel (where applicable), and labor; and leave a profit for the operator. The supply and demand for custom work services in any area will be reflected in the custom rates charged. Low rates may reflect the willingness of some farmers or machinery owners to do additional work to help offset the ownership costs of the machinery. They may also reflect good operating conditions such as large, level, obstruction-free fields and weed-free crops, which allow custom operators to work at normal or above normal speeds. High custom rates can indicate a shortage of operators willing to do custom work. They can also indicate poor weather conditions, awkward field shapes or sizes, and hard or stony soil conditions, which cause above normal breakages and increased costs to custom operators.

The data in this report show that custom rates vary -- in some cases quite widely. Some custom operators expressed concern over the increasing costs of machinery, machinery repairs and fuel. Others were concerned about the problems of adjusting their rates to meet increased costs at at time of changing farm prices. Custom operators who know the operating costs for their machines and the conditions they must work under can compare their own rates with the survey rate averages for their areas.

Most custom operators in Ontario perform their services without any type of written agreement. In some cases, disputes have occured about custom farmwork services provided. Custom hiring is a business arrangement and the terms of the arrangement should be written into a formal agreement.

Some of the items to be considered in a formal contract are:

1. Operation(s) to be performed;

2. Timeliness of the operation;

3. Rate schedule to be used;

4. Managerial practices to be followed; and

5. Payment considerations.

Other considerations that could be included are: the responsibility in case of machine breakdown; the role of the farmer in assisting the custom operator; and arrangements to be made on notice of contract cancellation.

Farmers who are thinking about buying new machines can get an idea of the rates being charged in their area for the various services custom operators perform. In addition to rates charged, farmers should consider other factors in hiring custom work, such as the availability of custom operators in their area to do the required operation and the timeliness needed in doing the work.

CUSTOM TILLAGE AND PLANTING

Depending on the area, and the number of replies received, custom charges for plowing, discing, and planting were reported on a per-acre and/or per-hour basis. In all areas, plowing rates varied with the conditions under which custom operators worked. These conditions included extra heavy soils, size of field, obstruction, time of plowing (such as spring or fall) and the kinds of crop residues handled such as cornstalks and long-term alfalfa or other sod fields. In some areas, custom operators charged an hourly rate for some tillage operations.

Some custom operators made a distinction in the discing rate charged depending on field obstructions, soil texture, shape of field, and whether harrows or a cultipacker were trailed behind the discs. Extra charges were usually made when added equipment was pulled behind a tandemn disc or field cutltivator.

If preemergent sprays or fertilizers, or both were applied at planting time, custom operators usually charged more for applying the materials. Rates charged for custom planting varied widely in some areas because operators included these additional charges. In most cases, farmers delivered the materials -- seed, fertilizers, sprays, water -- to the field.

Custom operators who charged by the hour for planting corn, beans, and small grains felt this method was fair to both the farmers and themselves. Farmers can speed up the planting operation if they help handle the fertilizer and seed. By using an hourly basis, custom operators can more easily calculate planting charges when fields are irregular and exact acreages unknown.

CUSTOM WEED CONTROL AND FERTILIZER APPLICATIONS

Some custom operators brought their own water supply tanks while others insisted that water be readily available. In some areas, rates were reported for the applicaton and immediate incorporation of preemergent sprays into the soil. The ready supply of water may have had a bearing on the rates charged.

In almost all cases, farmers supplied the materials for the weed-spraying operations. To avoid misunderstanding, the rate and the material used should be clearly agreed upon by the farmer and the custom operator prior to the commencement of each spraying job.

In some areas, rates were provided for applying anhydrous fertilizers but not for other nitrogen fertilizers. Rates varied between and within areas depending on who supplied the applicator and delivered the anhydrous supply tanks to the farm.

CUSTOM HARVESTING BEANS, SMALL GRAINS, AND CORN

Rates for combining varied because of crop lodging, weed growth, muddy fields, and other poor operating conditions. Some custom operators who normally charged by the acre charged by the hour if they were hired to open fields or if muddy or other abnormal conditions prevailed.

Combining rates varied widely in some areas because some custom operators supplied additional equipment such as wagons, elevators, and augers. Custom corn picking rates were not obtained in all survey areas. These rates also varied depending on the equipment supplied.

Custom operators in some areas quoted hourly rates for combining. Because of the difference in combine sizes, the range in rates obtained was quite wide. Understandably, four- and six-row combines harvest more acres per hour than two two-row combines. See Appendix table 1 for some guidance as to the rates in acres per hour for different combine sizes. No rates were reported for those custom operations where an insufficient number of replies was received.

Trucking rates for grains varied depending on the distance from the farm to the elevator, the facilities for loading and unloading, and the time of year. Truckers sometimes charged less per bushel for handling grain when there were convenient farm loading facilities and during nonharvest or less busy periods. On the other hand, when loading facilities were poor and during the harvest rush, some truckers charged their standard rates while others charged more to compensate for slow loading and delivery.

Rates for drying operations varied among custom operators supplying this service, because of the different drying systems and methods of charging. Therefore, custom drying charges were not reported because of the different ways of charging for this service.

The majority of custom farm drying operations are now using the drying charges as established by the Ontario Grain and Feed Dealers Association. These tables are in metric measure and show the number of kilograms of wet corn and soybeans required to yield the number of dry tonnes. Copies of these tables are shown in the Appendix of this report. The elevator charges per tonne for drying corn using natural gas at different moisture levels are provided in the tables. The table for drying corn using propane at different moisture levels is not available. These drying charges can be used as a guide in establishing custom rates for farm drying operations. These elevator drying charges do not include costs for handling grains, however, so an added cost per bushel may be made to cover handling charges.

CUSTOM SILO FILLING

Rates for silo filling of corn were most commonly figured on an

hourly basis. Some operators still charged according to silo diameter and height. Yields are difficult to determine when charging by the ton, especially with larger or horizontal silos. There were insufficient replies from operators charging by the ton, by diameter and by the acre to report rates for any area.

Custom operators prefer to charge by the hour because it is fairer to all concerned. They can go faster with a light crop and therefore charge less than a standard per-acre rate. If they have to travel a long distance from field to silo, the cost will be higher to the grower. It is also much easier to establish a total cost, especially when a bunker silo has been filled.

Rates for filling varied, depending on the combinations of number of men, number and size of tractors, size and type of harvester, number and type of forage wagons, and blower with or without a recutter attachment. In this survey, it was found that two groups of silo filling equipment were common to all areas of Ontario. One group consisted of two tractors, two-row harvester, blower, wagons, and two men. The other group consisted of one to three tractors, self-propelled harvester, blower, wagons, and one to three men. Depending on circumstances encountered, there were some variations within each grouping. For example, the number of men supplied to power the equipment varied according to conditions and area. Therefore, for each group in each area, a wide range in charges per hour occured. Tractors with higher horsepower, for example are able to move more tonnage into the silo per hour than tractors with lower horsepower.

The custom silo filler may make some adjustments in his charges by allowing a rate per hour for each additional man supplied as well as for each tractor supplied in addition to his usual silo filling equipment.

CUSTOM HAY HARVESTING

In all areas, swathing consisted of cutting and conditioning hay in one operation. Custom rates for conventional baling included the twine and varied within each survey area depending on the extra equipment supplied. Some custom operators charged more per bale with a bale stooker or wagon pulled behind the baler. The custom baling of large round bales occured in all survey areas except for Southern Ontario area 2.

The custom silo filling of haylage, unless some unusual conditions occur, would be the same as for custom silo filling of corn in most areas.

AERIAL OPERATIONS

This is the third year that custom rates for aerial applications and spraying were collected. Because of the numbers, no attempt was made to provide information on rates charged for any one area of Ontario. With only one or two responses, certain aerial operations were not published.

Depending on conditions encountered and distances travelled from a suitable landing strip to area of work, additional charges may occur. If any doubt occurs, a careful check should be made between the farmer and the aerial applicator over rates and additional charges, if any. Some custom aerial applicators charge on a per-pound or per load-basis. The rates in this report are representative of these charges on a per-acre and per-pound basis where enough responses were received.

Table 1. -Rates for Custom Tillage, Planting, Weed Control, and Fertilizer Applications, Area 1, Southern Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
			dollars per acre	
TILLAGE				
Plowing:				
Moldboard.....	50	14.14	15.00	10.00- 20.00
Chisel.....	6	13.33	12.00	10.00- 17.00
Discing.....	23	6.38	6.00	4.00- 9.00
Cultivating.....	21	6.59	7.00	5.00- 9.00
Soil saver.....	6	11.92	12.00	10.00- 15.00
PLANTING				
Corn & Soybeans....	46	8.06	8.00	4.00- 12.00
Small grains.....	10	6.77	8.00	5.00- 8.25
WEED CONTROL[a]				
Spraying.....	18	5.39	5.00	3.50- 10.00
Incorporating[b].....	10	8.55	8.00	7.00- 11.00
Row cultivating....	11	5.00	5.00	3.00- 6.00
Rotary hoeing.....	3	4.00	5.00	2.00- 5.00
FERTILIZING				
Anhydrous.....	9	7.08	9.00	4.00- 9.00

[a]Spraying and incorporating does not include any materials.

[b]Incorporating included the application of the spray material and working the material into the ground.

Table 2. -Rates for Custom Harvesting Operations, Area 1, Southern Ontario, 1984.

Operation	No. rptg.	Average	Most frequent	Range
			dollars	
HARVESTING CORN				
Picking per acre	11	34.77	40.00	20.00- 42.00
Combining per acre	68	28.82	30.00	25.00- 35.00
Trucking, per bushel	34	.13	.15	.08- .15
Trucking, per tonne	6	5.50	5.00	3.00- 8.00
HARVESTING SMALL GRAINS AND SOYBEANS, PER ACRE				
Small grains:				
Swathing	7	9.00	9.00	7.00- 12.00
Combining	50	23.63	25.00	18.00- 30.00
Soybeans	66	26.11	25.00	20.00- 30.00
HARVESTING WHITE BEANS, PER ACRE				
Combining	3	25.83	-	22.50- 30.00
FORAGE OPERATIONS				
Hay:				
Swathing, per acre	12	10.10	10.00	7.50- 18.00
Baling, per bale:				
Small rectangular	9	.32	.30	.23- .35
Large round	7	5.78	5.00	5.00- 8.00
Silo filling, per hour:[a]				
Group 1	5	92.00	90.00	80.00-100.00
Group 2	13	119.61	100.00	95.00-200.00

[a]The following combinations were used.

Group 1: 1 or 2 tractors, 2-row harvester, blower, wagons, and 2 men
Group 2: 1 or 2 tractors, SP 2- to 4-row harvester, blower, wagons, and 2 men.

NOTE: Adjustments can be made in silo filling operations by allowing a rate per hour for each additional man and tractor supplied.

Table 3. -Rates for Custom Tillage, Planting, Weed Control, and Fertilizer Applications, Area 2, Southern Ontario, 1984

Operations	No. rptg.	Average	Most frequent	Range
		dollars per acre		
TILLAGE				
Plowing, moldboard	46	13.60	15.00	7.50- 20.00
Soil saver	13	12.08	10.00	10.00- 15.00
Discing	26	7.76	8.00	6.00- 10.00
Cultivating	21	8.31	7.00	5.50- 13.00
PLANTING				
Corn & Soybeans	56	9.28	10.00	6.00- 16.00
Small grains	15	8.70	8.00	6.00- 12.50
WEED CONTROL[a]				
Incorporating[b]	15	10.77	10.00	9.00- 14.00
Spraying	27	5.27	5.00	4.00- 8.00
Row cultivate	5	5.10	5.00	3.50- 7.00
FERTILIZING				
Anhydrous	9	7.72	8.00	5.00- 12.50

[a]Spraying and incorporating does not include any materials.

[b]Incorporating included the application of the spray material and working the material into the ground.

Table 4. -Rates for Custom Harvesting Operations, Area 2, Southern Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
			dollars	
HARVESTING CORN				
Combining:				
Per acre	67	30.24	30.00	25.00- 40.00
Per hour	4	122.50	..	90.00-160.00
Trucking:				
Per bushel	8	.14	.15	.14- .18
Per tonne	18	5.86	6.00	4.00- 8.00
HARVESTING SMALL GRAINS AND SOYBEANS				
Combining:				
Small grains, per acre	61	21.97	20.00	18.00- 29.00
Small grains, per hour	7	91.43	130.00	40.00-130.00
Soybeans, per acre	36	30.39	30.00	25.00- 40.00
FORAGE OPERATIONS				
Hay:				
Swathing, per acre	12	10.67	10.00	7.00- 14.00
Swathing, per hour	4	38.25	38.00	30.00- 45.00
Baling, per bale	15	.34	.35	.25- .45
Silo filling, per hour:[a]				
Group 1	10	84.50	90.00	60.00-105.00
Group 2	11	125.00	125.00	90.00-175.00
SNOW REMOVAL				
Per hour	6	37.25	50.00	25.00- 50.00

[a]The following combinations were used.

Group 1: 2 tractors, 2-row harvester, blower, wagons, and 2 men.
Group 2: 1 to 3 tractors, SP 2- or 3-row harvester, blower, wagons, and 1 to 3 men.

NOTE: Adjustments can be made in silo filling operations by allowing a rate per hour for each additional man and tractor supplied.

Table 5. Rates for Custom Tillage, Planting, Weed Control, Fertilizer Applications, Area 3, Western Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
			dollars	
TILLAGE, PER ACRE				
Plowing, moldboard	70	13.40	12.00	10.00- 20.00
Soil saver	5	13.40	..	10.00- 18.00
Discing, per acre	28	7.28	8.00	6.00- 10.00
Cultivating:				
Per acre	46	6.01	6.00	3.00- 8.50
PLANTING, PER ACRE				
Corn & soybeans	70	8.73	8.00	6.00- 14.00
Small grains, drilling	34	7.60	7.00	4.00- 10.00
WEED CONTROL, PER ACRE[a]				
Incorporating[b]	7	9.64	10.00	8.00- 11.00
Spraying	53	4.80	5.00	3.00- 8.00
Row cultivating	6	5.30	5.00	4.50- 7.00
FERTILIZING				
Apply "N", per acre[c]	6	4.08	3.50	3.50- 5.00
MANURE HANDLING, PER HOUR				
Loading & spreading solid manure[d]	7	60.57	60.00	25.00-100.00

[a]Spraying and incorporating does no include any materials.

[b]Incorporating included the application of the spray material and working the material into the ground.

[c]Dry fertilizer applied in spring to wheat and spring grains (no materials included).

[d]Loading and spreading of solid manure includes 2 tractors, loader, spreader, and 1 man.

Table 6. -Rates for Custom Harvesting Operations, Area 3, Western Ontario 1984.

Operation	No. rptg.	Average	Most frequent	Range
			dollars	
HARVESTING CORN				
Combining:				
Per acre	82	30.10	30.00	24.00- 36.00
Per hour	24	107.92	100.00	80.00-150.00
Trucking, per tonne	29	6.12	5.00	4.00- 10.00
HARVESTING SMALL GRAINS AND SOYBEANS				
Swathing grains:				
Per acre	44	9.01	8.00	5.00- 12.00
Combining grains:				
Per acre	85	22.55	22.00	16.50- 35.00
Per hour	18	98.11	100.00	85.00-110.00
Combining soybeans:				
Per acre	42	28.30	30.00	22.00- 33.00
Per hour	11	115.45	..	90.00-150.00
HARVESTING WHITE BEANS, PER ACRE				
Pulling & windrowing	6	14.20	..	9.70- 18.00
Combining	11	28.04	30.00	23.00- 31.00
FORAGE OPERATIONS				
Swathing hay:				
Per acre	32	9.73	10.00	7.00- 14.00
Per hour	7	35.14	..	21.00- 50.00
Baling hay, per bale:				
Small rectangular	30	.34	.35	.25- .46
Large round	19	6.25	6.00	4.00- 8.00
Silo filling, per hour:[a]				
Group 1	14	86.00	85.00	50.00-110.00
Group 2	17	115.76	100.00	90.00-195.00
SNOW REMOVAL				
Per hour	22	36.72	30.00	25.00- 60.00

[a]The following combinations were used:
Group 1: 1 or 2 tractors, 2-row harvester, wagons, blower, and 2 men.
Group 2: 1 to 3 tractors, SP 2- or 3-row harvester, blower, wagons, and 1 to 3 men.

NOTE: Adjustments can be made in silo filling operations by allowing a rate per hour for each additional man and tractor supplied.

Table 7. -Rates for Custom Tillage, Planting, Weed Control, Fertilizer Applications, Area 4, Central Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
		dollars		
TILLAGE[a]				
Plowing:				
Per acre	33	13.79	15.00	10.00- 16.00
Per hour	9	43.33	..	20.00- 75.00
Discing:				
Per acre	14	7.34	8.00	5.00- 9.00
Cultivating:				
Per acre	22	6.80	7.00	5.00- 10.00
Per hour	8	40.60	..	20.00- 75.00
PLANTING, PER ACRE				
Corn	32	9.00	8.00	7.50- 12.00
Soybeans	9	9.39	10.00	8.00- 10.00
Small grains	26	7.92	8.00	4.00- 11.00
WEED CONTROL, PER ACRE[b]				
Spraying	23	5.43	5.00	3.00- 8.00
Incorporating	10	10.45	..	8.00- 15.00
FERTILIZER, PER ACRE				
Spread dry	4	4.00	4.00	3.00- 5.00

[a]Per hour rates for the tillage operations of plowing, discing, and cultivating differ according to the size of tractor and equipment used to perform the operations.

[b]Spraying and incorporating does not include any materials.

[c]Incorporating included the application of the spray material and working the material into the ground.

Table 8. -Rates for Custom Harvesting Operations, Area 4, Central Ontario, 1984.

Operation	No. rptg.	Average	Most frequent	Range
		dollars		
HARVESTING CORN				
Combining				
Per acre	26	30.46	30.00	28.00- 34.00
Per hour	12	93.58	..	45.00-240.00
Trucking, per tonne	14	7.14	7.00	5.00- 8.50
HARVESTING SMALL GRAINS				
Combining grains:				
Per acre	30	23.35	25.00	20.00- 28.00
Per hour	16	73.68	70.00	42.50-125.00
Combining soybeans:				
Per acre	16	28.88	30.00	25.00- 32.00
FORAGE OPERATIONS				
Swathing hay:				
Per acre	13	11.08	..	9.00- 13.00
Per hour	6	45.42	45.00	27.50- 75.00
Baling hay, per bale:				
Small rectangular	19	.33	.30	.24- .40
Large round	13	6.58	6.00	4.50- 10.00
Silo filling, per hour:[a]				
Group 1	14	76.78	80.00	50.00-105.00
Group 2	8	118.75	100.00	85.00-165.00
SNOW REMOVAL				
Per hour	11	33.00	..	20.00- 50.00

[a]The following combinations were used.

Group 1: 1 or 2 tractors, 2-row harvester, wagons, blower, and 1 or 2 men.
Group 2: 1 or 2 tractors, SP 2- or 3-row harvester, wagons, blower, and 1 or 2 men.

NOTE: Adjustments can be made in silo filling operations by allowing a rate per hour for each additional man and tractor supplied.

Table 9. -Rates for Custom Tillage, Planting, Weed Control, Fertilizer Applications, Area 5, Eastern Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
		dollars		
TILLAGE[a]				
Plowing:				
Per acre	19	16.84	15.00	10.00- 24.00
Per hour	32	49.97	..	20.00-100.00
Discing:				
Per acre	12	10.25	8.00	6.00- 15.00
Per hour	19	52.58	..	20.00-100.00
Cultivating:				
Per acre	6	6.92	7.00	6.00- 7.50
Per hour	9	56.67	50.00	40.00- 80.00
PLANTING				
Corn:				
Per acre	34	9.80	10.00	5.00- 13.00
Per hour	9	36.00	..	23.00- 60.00
Small grains:				
Per acre	10	7.90	6.00	6.00- 13.00
WEED CONTROL[b]				
Spraying:				
Per acre	27	5.59	5.00	2.00- 8.00
Per hour	6	34.17	..	25.00- 45.00
Incorporating[c]:				
Per acre	5	12.50	10.00	9.00- 18.50
FERTILIZING, PER ACRE				
Anhydrous	5	7.80	..	7.00- 9.00
Spread dry	4	4.00	4.50	3.00- 4.50
MANURE HANDLING				
Loading and spreading solid manure[d]	8	50.62	45.00	20.00- 80.00

[a]Per hour rates for the tillage operations of plowing, discing, and cultivating differ according to the size of tractor and equipment used to perform the operations.

[b]Spraying and incorporating does not include any materials.

[c]Incorporating included the application of the spray material and working the material into the ground.

[d]Loading and spreading of solid manure includes 2 tractors, loader, spreader, and 1 man.

Table 10. -Rates for Custom Harvesting Operations, Area 5, Eastern Ontario, 1984.

Operation	No. rptg.	Average	Most frequent	Range
		dollars		
HARVESTING CORN				
Picking, per hour.....	5	44.20	..	25.00- 58.00
Combining:				
Per acre.....	10	30.60	30.00	25.00- 35.00
Per hour.....	36	93.42	100.00	60.00-130.00
Trucking, per tonne.....	8	5.94	6.00	5.00- 7.00
HARVESTING SMALL GRAINS				
Combining:				
Per acre.....	13	23.85	..	20.00- 28.00
Per hour.....	38	78.03	80.00	45.00-150.00
Combining Soybeans				
Per acre.....	4	28.75	28.00	26.00- 33.00
FORAGE OPERATIONS				
Swathing:				
Per acre.....	3	7.67	..	5.00- 10.00
Per hour.....	9	35.78	35.00	25.00- 45.00
Baling hay, per bale:				
Small rectangular.....	13	.32	.35	.25- .40
Large round bales.....	10	6.50	7.00	5.50- 8.00
Silo filling, per hour:[a]				
Group 1.....	23	80.78	75.00	40.00-110.00
Group 2.....	13	109.61	120.00	80.00-130.00
SNOW REMOVAL				
Per hour.....	13	40.69	40.00	25.00- 70.00

[a]The following combinations were used:

Group 1: 1 or 2 tractors, 2-row harvester, wagons, blower, and 1 or 2 men.
Group 2: 1 or 2 tractors, SP 2- or 3-row harvester, blower, wagons, and 1 or 2 men.

NOTE: Adjustments can be made in silo filling operations by allowing a rate per hour for each additional man and tractor supplied.

Table 11. -Rates for Custom Farmwork Operations, Area 6, Northern Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
		dollars		
TILLAGE[a]				
Plowing:				
Per hour	6	41.50	60.00	22.00- 60.00
Discing:				
Per hour	3	41.66	..	30.00- 45.00
WEED CONTROL				
Spraying, per acre[b]	4	3.25	..	3.00- 3.50
HARVESTING SMALL GRAINS[a]				
Combining:				
Per acre	3	23.67	..	21.00- 25.00
Per hour	16	59.06	..	25.00-110.00
FORAGE OPERATIONS				
Swathing hay, per hour.	5	31.60	30.00	25.00- 45.00
Baling, large round bales, per bale	9	4.94	..	3.00- 7.00

[a]Per hour rates for the tillage operations of plowing and discing and for harvesting operations differ according to the size of tractor and equipment, and size of combine used.

[b]Spraying does not include any materials.

Table 12. -Rates for Custom Farmwork Operations, Aerial Spraying, Ontario, 1984

Operation	No. rptg.	Average	Most frequent	Range
			dollars	
APPLICATION[a]				
Seeding:				
Per acre	6	9.08	..	6.50- 10.00
Per pound	3	.076	..	.070- .085
Fertilizer:				
Per acre	3	7.17	..	5.00- 10.00
Per pound	7	.076	.085	.065- .085
SPRAYING, PER ACRE[a]				
Herbicides	10	6.04	..	3.50- 10.00
Insecticides	7	6.16	..	3.25- 10.00
Fungicides	8	6.31	4.50	4.50- 10.00

[a]Aerial applications and spraying do not include any materials.

APPENDIX

Appendix Table 1.--Rates of Accomplishing Farm Operations in Ontario, 1984

Operation	No. rptg.	Acres per hour: Average	Most frequent	Range
TILLAGE				
Plowing:				
60-85 HP	10	2.3	2	1 1/2-2 1/2
86-115 HP	13	3.4	3	2 1/2-4
116-135 HP	9	3.9	4	3-5
136-160 HP	13	4.6	5	3-6
161-200 HP.	3	6.8	6 1/2	6 1/2-7 1/2
Discing:				
60-85 HP	6	5.3	5	3 1/2-8
86-115 HP	5	9.5	10	7 1/2-11
136-160 HP	6	10.0	11	7-14
Incorporating, 80-100 HP	5	6.7	7	4-9
PLANTING				
Corn:				
4-row	49	3.9	4	2 1/2-5
6-row	8	6.7	6	4 1/2-9
8-row	6	7.6	8	5 1/2-9
Small grains, 15- to 17-run	5	4.2	4 1/2	3-5
SUMMER OPERATIONS				
Spraying:				
Tractor & sprayer	28	7.8	7	5-12
SP sprayer	8	16.9	20	10-25
Row cultivate	3	8.3	8	7-10
Anhydrous application:				
100 HP	4	5.0	5	4
150 HP	3	8.7	8	8-10
HARVESTING SMALL GRAINS				
Swathing:				
10'	9	3.0	3	2-4
12'	5	3.6	3 1/2	3-5
Combining: [b]				
10'	10	2.7	2 1/2	2-3
11'	4	2.8	2 1/2	2-4
12'	6	3.6	4	2-5
13'	21	4.0	4	2 1/2-9
14'	11	5.1	4 1/2	3-10
15' to 18'	8	5.6	6	3-10

(Appendix Table 1 is concluded on the next page).

Appendix Table 1 --concluded

	No. rptg.	Acres per hour: Average	Most frequent	Range
HARVESTING CORN & BEANS				
Combine corn:				
2-row	4	2.0	1 1/2	1 1/2-3
4-row	44	3.2	3 1/2	2 1/2-5
6-row	11	4.3	4	3-7
Corn picking:				
1-row	3	1.0	1	1-1 1/4
2-row	6	1.7	2	1-2
3-row	2	3.0	3	3
Combine soybeans:				
13' & under	11	3.6	4	3-4
14' & over	5	4.6	5	3-6
Drying, batch dried:				
Bushels per hour	3	115.0	115	100-125
HARVESTING FORAGES				
Swathing hay:				
Swather, 10'	9	3.1	3	2-4
Swather, 12'	5	3.6	4	3-5
Haybine, 9'	4	2.9	3	2-4
Silo filling: [b]				
Group 1	3	1.5	1 1/2	1-2
Group 2	19	2.1	2	1 1/2-4
Group 3	7	2.2	2	1 1/2-3
Group 4	4	3.1	3	2-4
Group 5	3	4.2	4	4-4 1/2
Baling, dropped on ground:				
Bales per hour (small rectangular)	3	250.0	250	225-275

[a] Information based on survey conducted in Ontario in 1974.

[b] The width of the cutting bar was used to rate the combines, although it is realized that the size of the cleaning and the separation area are also important in rating the capacity of combines.

The following combinations were used:

Group 1: tractor drawn, 1-row harvester with wagons.

Group 2: tractor drawn, 2-row harvester with wagons.

Group 3: self-propelled, 2-row harvester with wagons.

Group 4: self-propelled, 3-row harvester with wagons.

Group 5: self-propelled or tractor drawn harvesters with trucks.

Appendix Table 2.-Corn Conversion Table - Wet Kilograms to Dry Tonnes Using Natural Gas, 1984.

Moisture	Wet Corn (Divisor)	Drying Charge[a]	Moisture	Wet Corn (Divisor)	Drying Charge[a]	Moisture	Wet Corn (Divisor)	Drying Charge[a]
%	kg	$	%	kg	$	%	kg	$
15.5	1000.0							
15.6	1011.3		19.6	1061.6		23.6	1117.2	
15.7	1012.5		19.7	1064.9		23.7	1118.7	
15.8	1013.7	4.30	19.8	1064.3	8.50	23.8	1120.1	10.95
15.9	1014.9		19.9	1065.6		23.9	1121.6	
16.0	1016.1		20.0	1066.9		24.0	1123.1	
16.1	1017.3		20.1	1068.3		24.1	1124.6	
16.2	1018.5		20.2	1069.6		24.2	1126.0	
16.3	1019.8	5.25	20.3	1070.9	9.20	24.3	1127.5	11.20
16.4	1021.0		20.4	1072.3		24.4	1129.0	
16.5	1022.2		20.5	1073.6		24.5	1130.5	
16.6	1023.4		20.6	1075.0		24.6	1132.0	
16.7	1024.7		20.7	1076.3		24.7	1133.5	
16.8	1025.9	6.15	20.8	1077.7	9.45	24.8	1135.0	11.45
16.9	1027.1		20.9	1079.1		24.9	1136.5	
17.0	1028.4		21.0	1080.4		25.0	1138.0	
17.1	1029.6		21.1	1081.8		25.1	1139.6	
17.2	1030.8		21.2	1083.2		25.2	1141.1	
17.3	1032.1	7.10	21.3	1084.5	9.65	25.3	1142.6	11.70
17.4	1033.3		21.4	1085.9		25.4	1144.1	
17.5	1034.6		21.5	1087.3		25.5	1145.7	
17.6	1035.8		21.6	1088.7		25.6	1147.2	
17.7	1037.1		21.7	1090.1		25.7	1148.8	
17.8	1038.4	7.55	21.8	1091.5	9.90	25.8	1150.3	11.95
17.9	1039.6		21.9	1092.9		25.9	1151.9	
18.0	1040.9		22.0	1094.3		26.0	1153.4	
18.1	1042.2		22.1	1095.7		26.1	1155.0	
18.2	1043.4		22.2	1097.1		26.2	1156.6	
18.3	1044.7	7.75	22.3	1098.5	10.20	26.3	1158.1	12.25
18.4	1046.0		22.4	1099.9		26.4	1159.7	
18.5	1047.3		22.5	1101.3		26.5	1161.3	
18.6	1048.6		22.6	1102.8		26.6	1162.9	
18.7	1049.9		22.7	1104.2		26.7	1164.4	
18.8	1051.2	8.00	22.8	1105.6	11.45	26.8	1166.0	12.50
18.9	1052.4		22.9	1107.0		26.9	1167.6	
19.0	1053.7		23.0	1108.5		27.0	1169.2	
19.1	1055.0		23.1	1109.9		27.1	1170.8	
19.2	1056.4		23.2	1111.4		27.2	1172.4	
19.3	1057.7	8.25	23.3	1112.8	10.70	27.3	1174.1	12.70
19.4	1059.0		23.4	1114.3		27.4	1175.7	
19.5	1060.3		23.5	1115.7		27.5	1177.3	

Wet kilograms to dry tonnes chart showing number of kilograms of wet corn at varying degrees of moisture that are required to yield a dry tonne including allowance of 1 percent invisible loss. Charges for drying assessed per tonne of dry corn

(Appendix Table 2 is concluded on the next page)

Appendix Table 2. -concluded

Moisture	Wet Corn (Divisor)	Drying Charge[a]	Moisture	Wet Corn (Divisor)	Drying Charge[a]	Moisture	Wet Corn (Divisor)	Drying Charge[a]
%	kg	$	%	kg	$	%	kg	$
27.6	1178.9		32.1	1257.0		36.6	1346.3	
27.7	1180.5		32.2	1258.9		36.7	1348.4	
27.8	1182.2	12.95	32.3	1260.8	15.25	36.8	1350.5	20.45
27.9	1183.8		32.4	1262.6		36.9	1352.7	
28.0	1185.5		32.5	1264.5		37.0	1354.8	
28.1	1187.1		32.6	1266.4		37.1	1357.0	
28.2	1188.8		32.7	1268.3		37.2	1359.1	
28.3	1190.4	13.25	32.8	1270.1	15.55	37.3	1361.3	21.10
28.4	1192.1		32.9	1272.0		37.4	1363.5	
28.5	1193.8		33.0	1273.9		37.5	1365.7	
28.6	1195.4		33.1	1275.8		37.6	1367.8	
28.7	1197.1		33.2	1277.7		37.7	1370.0	
28.8	1198.9	13.50	33.3	1279.7	15.75	37.8	1372.2	21.80
28.9	1200.5		33.4	1281.6		37.9	1374.5	
29.0	1202.2		33.5	1283.5		38.0	1376.7	
29.1	1203.9		33.6	1285.4		38.1	1378.9	
29.2	1205.6		33.7	1287.4		38.2	1381.1	
29.3	1207.3	13.75	33.8	1289.3	16.45	38.3	1383.4	22.45
29.4	1209.0		33.9	1291.3		38.4	1385.6	
29.5	1210.7		34.0	1293.2		38.5	1387.9	
29.6	1212.4		34.1	1295.2		38.6	1390.1	
29.7	1214.1		34.2	1297.2		38.7	1392.4	
29.8	1215.9	14.00	34.3	1299.1	17.10	38.8	1394.7	23.10
29.9	1217.6		34.4	1301.1		38.9	1396.9	
30.0	1219.3		34.5	1303.1		39.0	1399.2	
30.1	1221.1		34.6	1305.1		39.1	1401.5	
30.2	1222.8		34.7	1307.1		39.2	1403.8	
30.3	1224.6	14.20	34.8	1309.1	17.80	39.3	1406.2	23.80
30.4	1226.3		34.9	1311.1		39.4	1408.5	
30.5	1228.1		35.0	1313.1		39.5	1410.8	
30.6	1229.9		35.1	1315.2		39.6	1413.1	
30.7	1231.7		35.2	1317.2		39.7	1415.5	
30.8	1233.4	14.50	35.3	1319.1	18.40	39.8	1417.8	24.45
30.9	1235.2		35.4	1321.3		39.9	1420.2	
31.0	1237.0		35.5	1323.3		40.0	1422.6	
31.1	1238.8		35.6	1325.4		40.1	1424.9	
31.2	1240.6		35.7	1327.4		40.2	1427.3	
31.3	1242.4	14.75	35.8	1329.5	19.10	403.	1429.7	25.15
31.4	1244.2		35.9	1331.6		40.4	1432.1	
31.5	1246.0		36.0	1333.6		40.5	1434.5	
31.6	1247.9		36.1	1335.7		40.6	1436.9	
31.7	1249.7		36.2	1337.8		40.7	1439.3	
31.8	1251.5	15.00	36.3	1339.9	19.80	40.8	1441.8	25.75
31.9	1253.4		36.4	1342.0		40.9	1444.2	
32.0	1255.2		36.5	1344.1		41.0	1446.7	

[a] Suggested charges based on average labour, overhead and fuel costs for commercial natural gas dryers, effective September 1, 1984.

Source: Ontario Grain and Feed Dealers Association.

Appendix Table 3. -Soybean Conversion Table - Wet Kilograms to Dry Tonnes, 1984

Moisture	Soybeans (Divisor)	Drying Charge[a]	Moisture	Soybeans (Divisor)	Drying Charge[a]	Moisture	Soybeans (Divisor)	Drying Charge[a]
%	kg	$	%	kg	$	%	kg	$
10.0	955.6							
10.1	956.6		14.1	1006.2		18.1	1055.3	
10.2	957.7		14.2	1007.3		18.2	1056.6	
10.3	958.8		14.3	1008.5	3.15	18.3	1057.9	10.20
10.4	959.8		14.4	1009.7		18.4	1059.2	
10.5	960.9		14.5	1010.9		18.5	1060.5	
10.6	962.0		14.6	1012.1		18.6	1061.8	
10.7	963.0		14.7	1013.2		18.7	1063.1	
10.8	964.1		14.8	1014.4	4.10	18.8	1064.4	11.00
10.9	965.2		14.9	1015.6		18.9	1065.7	
11.0	966.3		15.0	1016.8		19.0	1067.0	
11.1	967.4		15.1	1018.0		19.1	1068.4	
11.2	968.5		15.2	1019.2		19.2	1069.7	
11.3	969.6		15.3	1020.4	5.05	19.3	1071.0	11.95
11.4	970.7		15.4	1021.6		19.4	1072.3	
11.5	971.8		15.5	1022.8		19.5	1073.7	
11.6	972.9		15.6	1024.1		19.6	1075.0	
11.7	974.0		15.7	1025.3		19.7	1076.3	
11.8	975.1		15.8	1026.5	5.90	19.8	1077.7	12.80
11.9	976.2		15.9	1027.7		19.9	1079.0	
12.0	977.3		16.0	1028.9		20.0	1080.4	
12.1	978.4		16.1	1030.2		20.1	1081.7	
12.2	979.5		16.2	1031.4		20.2	1083.1	
12.3	980.6		16.3	1032.6	6.70	20.3	1084.4	13.65
12.4	981.7		16.4	1033.9		20.4	1085.8	
12.5	982.9		16.5	1035.1		20.5	1087.2	
12.6	984.0		16.6	1036.3		20.6	1088.5	
12.7	985.1		16.7	1037.6		20.7	1089.9	
12.8	986.2		16.8	1038.8	7.55	20.8	1091.3	14.60
12.9	987.4		16.9	1040.1		20.9	1092.7	
13.0	988.5		17.0	1041.3		21.0	1094.1	
13.1	989.6		17.1	1042.6		21.1	1095.4	
13.2	990.8		17.2	1043.8		21.2	1096.8	
13.3	991.9		17.3	1045.1	8.50	21.3	1098.2	15.45
13.4	993.1		17.4	1046.4		21.4	1099.6	
13.5	994.2		17,5	1047.6		21.5	1101.0	
13.6	995.4		17.6	1048.9		21.6	1102.4	
13.7	996.5		17.7	1050.2		21.7	1103.8	
13.8	997.7		17.8	1051.5	9.25	21.8	1105.2	16.15
13.9	998.8		17.9	1052.7		21.9	1106.7	
14.0	1000.0		18.0	1054.0		22.0	1108.1	

(Appendix Table 3 is concluded on the next page)

Appendix Table 3. -concluded

Moisture	Soybeans (Divisor)	Drying Charge[a]	Moisture	Soybeans (Divisor)	Drying Charge[a]	Moisture	Soybeans (Divisor)	Drying Charge[a]
%	kg	$	%	kg	$	%	kg	$
22.1	1109.5		23.1	1123.9		24.1	1138.7	
22.2	1110.9		23.2	1125.4		24.2	1140.2	
22.3	1112.4	17.10	23.3	1126.9	19.00	24.3	1141.7	20.60
22.4	1113.8		23.4	1128.3		24.4	1143.3	
22.5	1115.2		23.5	1129.8		24.5	1144.8	
22.6	1116.7		23.6	1131.3		24.6	1146.3	
22.7	1118.1		23.7	1132.8		24.7	1147.8	
22.8	1119.6	17.95	23.8	1134.3	19.75	24.8	1149.3	21.55
22.9	1121.0		23.9	1135.7		24.9	1150.3	
23.0	1122.5		24.0	1137.2		25.0	1152.4	

a Drying charges are negotiated between the Ontario Grain and Feed Dealers Association and the Soybean Growers' Marketing Board. Rates listed were effective from September 1, 1984.

Note: This chart shows the number of kilograms of soybeans at varying degrees of moisture that are required to yield a dry tonne at 14 percent moisture, including allowance of 1 percent invisible loss during drying. Charges for drying are assessed per tonne of dry soybeans.

Source: Ontario Grain and Feed Dealers Association.

NEGOTIATED DEALER HANDLING ALLOWANCE ON SOYBEANS BASIS MARKETING AGREEMENT

$/tonne	$/tonne
000.00 - 150.00	7.90
150.01 - 200.00	8.50
200.01 - 250.00	9.30
250.01 - 300.00	9.90
300.01 - 350.00	10.80
350.01 - 400.00	11.60
400.01 - 450.00	12.20
450.01 - 500.00	12.80

For each $50.00 over $500.00 per tonne add .55 per tonne.

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